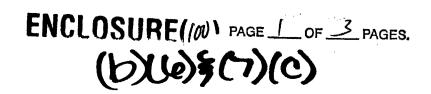
The Events of 17 AUG 2006 USCGC HEALY PA-C

On the afternoon of 17 Aug on board USCGC HEALY we had finished about 4 weeks of science work. I got a call from Ms Jessica Hill and she informed me that ice liberty would be happening soon and asked me if I would be a dive tender for the three divers on board, as I had been the dive tender for them last year on many occasions for science dives. I said yes I would be glad to help. This would be the first dive of the AWS 2006 trip. When the ship hove to in the ice, I went to the dive locker and saw the divers, Miss Hill, BM2 Steve Duque, and Ensemble busy making ready for ice diving. I took down the rolls of tending line for them to the ice. I came back to the dive locker and asked them if there were anything else I could do. I overheard their conversation and BM2 remarked that he was having some kind of trouble with his inflatable bladder or similar equipment and was wondering if he should even wear it, or words to that effect. BM2 Duque was ready before the two female officers so I assisted him walking down the gangway with his equipment.

After a few more minutes all three divers were on the ice ready to dive. The spot was a sturdy ice floe just off the port side of the bow of the ship. Only a few yards separated the bow from the entry point. I helped BM2 Duque dress out and he ran back to the dive locker for a new pair of gloves as his were not sealing well. We put all the gear on and I secured BM2 Duque's line to a D-ring on his right waistline. Miss Hill gathered the 3 divers and the 3 tenders around for a quick review of who was tending whom and what the dive signals on the tending lines would be. Mr. would tend Misse would tend Miss Hill's line, and I would tend BM2 Duque's line. She stated that this would be a 20-foot dive (depth) and the signals would be 1 pull: are you OK? Two pulls, give slack 3 pulls take in slack and 4 or more pulls was the trouble signal. Last year I tended the divers for surface-supplied dives from the LCVP's and was familiar with procedures, though this was the first time I tended a SCUBA dive in the ice. They would go in and do a surface check first, then proceed with the dive and then come back to use the underwater camera later for pictures under the ice. All three divers sat at the water's edge for about 10 minutes. There was a delay trying to fix something on one of the other divers' suits. BM2 Duque's air was flowing through the wait and he complained "I am losing all my air" but everyone was soon ready.

Ms was in the water for a few minutes near the surface and came out after saying her suit leaked around the neck or face. Two or three minutes after she came out BM2 Duque had to come out and sit on the ice to warm his hands complaining they were cold. This took 5-10 minutes as we took off his gloves for him, let him warm his hands, then regloved him. During the time he was on the ice warming his hands, he complained he was "floating" too much and would I please put an additional 5 lbs of sandbag weight on either side. I did as he asked. Then he asked for an additional 2/3 lb weights on either side. I put a 3 lb weight on one side (may have been his left zippered pouch) and finding no 3 lb sandbags weighted the opposite side with a 2 lb bag. I told him I added the weights but substituted the 3 lb bag for the remaining 2 lb bag and was this all right, he



said "that's fine" and myself and MK1 assisted him put his gear back on. I do not believe Ms Hill came out of the water this entire time but was at the surface. He scooted in the water rear-end off the edge of the floe, and Ms Hill and BM2 Duque proceeded to do surface checks for about a minute or two then BM2 gave two tugs on his line and swam away putting immediate moderate tension on my line. The tension on the line was about the same as I had experienced in last year's dives, though the lines for surface-supply were much sturdier. I could see them below the water at about 10-15 feet, and then lost visual contact as they swam out slowly a bit under a small chunk of ice. The lines were tending at about 10 o'clock at first, then directly ahead at 11-1 o'clock position in and were tending horizontally at a shallow angle.

About 2-3 minutes into the dive, I felt a sudden tightness on my tending line and it started paying out through my grip. After 4 or 5 revolutions of line off the reel I began to increase my resistance. The line still tended at a shallow angle and had the impression BM2 Duque was swimming away from me vigorously. I noticed DC3 and he could not control the payout either and had reached nearly the end of his line. My grip tightened on my line and it began to slow with a lot of exertion and leaning back, but was still paying out. I quickly flipped my gloves off one at a time to get a better grip but it did not help. Very concerning was the amount of line off the reel in less than a minute: I estimated over 100 feet and I did not like it. I never felt any distinct tug signals only tension on the line. I did a lean-back on the ice and a squat lift to try and regain some of the lost line and managed a good one pull. No answer, only tension on the line. I was swearing, saying "This is all you get, you are not taking any more away from me" or something like that. I needed help and got it. MK1 came to my assistance to hold the line which by this time had a tremendous amount of tension. Both of us could not hold the nylon line as it was still slipping through our grip. I put a quick bight in the line on the deck and tried stepping into it for traction while at the same time wrapping my arm around the line to heave around on it and tried to walk backwards but had to release as I was being tugged to the water's edge. The payout finally stopped with MK1 holding the line at the water's edge and me about 10-12 feet aft of him in a lower tug o'war position. We decided to bring them up and commenced to do so slowly, at about 1 foot per second as instructed previously and coached by ENS (By this time at least 6-8 people had come to help). I counted out loud as the line slowly came up. They were visible in the water at about the 30-40 foot level. We could see LT Hill first, then BM2 Duque. Both divers were not moving and Miss Hill had her line slightly tangled in her gear. No bubbles were coming from either diver. We pulled them out. I am not exactly sure how much time had elapsed from when I saw them swim away together to the time we got them out of the water but my estimate is no more than 12 minutes.

We brought them to the surface and immediately placed them on the ice. Both were unresponsive, had copious frothy sputum, BM2 Duque's eyes had bulged slightly out of sockets and both divers had very dilated pupils, no breathing, no pulse. CPR was commenced immediately and stretcher bearers were called for. Once I was assured that basic ABC's and First Aid had begun and transport was on its way, I rushed on board to fetch the hyperlite dive chamber and be ready to receive them both in sickbay. Once in sickbay, we continued CPR and attempted to clear the airway on both patients who were

still unresponsive and foaming thick frothy sputum at the mouth. I worked on BM2 Duque while HSC was working on LT Hill. At least 3-4 people were assisting with CPR on each patient and engineers were assembling the hyperlite in sickbay. BM2 Duque's SPO2 was 78% and he was very pale in the face and his fingernail beds were cyanotic. LT Hill 's vital signs were the same. CPR with bag valve on O2 was commenced. Both patients received 2 vial of epinephrine 1 mg each directly by injection to the heart. Intubation was extremely difficult and repeated attempts the tube went in the stomachs of both patients. Each patient received 1 mg of atropine by direct injection to the heart. A heart monitor/defibrillator was attached to BM2 Duque and a defibrillator to LT Hill. There was complete asystole on both patients and no shocks administered but continued with CPR. By this time the hyperlite chamber was ready for service. I was getting very frustrated at this point because my intubation had obviously gone in the esophagus again and considered a tracheotomy when the flight surgeon came on the line again via an INMARSAT link. By this time It had been almost 1 hour since they were out of the water with apnea and asystole and consulting CDR the flight surgeon in Alameda., I "called the code" and pronounced death at 2001 local time, under his direction.

The bodies were undressed and jewelry removed, and cleaned off as much as possible. They were secured in body bags (each double bagged) with labels on each bag, and triage tags placed around the neck of both deceased victims. The bodies were taken to a science reefer and stored at a temp of approximately 36 degrees F. for transport to Barrow, AK.